REMARKS

Claims 1, 5, 16, 18, 20-29 and 31 are amended. Claims 2 and 17 are canceled without prejudice. Claims 1, 3-16, 18-40 are pending. In view of the following remarks, Applicant respectfully requests withdrawal of the rejections and forwarding of the application on to issuance.

Claim Rejections

Claims 1, 3-4, 16 and 28-30 stand rejected under 35 U.S.C. § 103(a) over a publication to Shannon entitled "Java 2 Platform Enterprise Edition Specification, v1.2" (hereinafter "Shannon") in view of a publication to Sun entitled "Java 2 platform, Standard Edition, v1.2.2 API Specification" (hereinafter "Sun").

Claims 5-15 and 31-40 stand rejected under 35 U.S.C. § 103(a) over Sun in view of a publication to Flanagan entitled "Java in a NutShell", (hereinaster "Flanagan").

Claims 2 and 17-27 stand rejected under 35 U.S.C. § 103(a) over Shannon and Sun, in view of Flanagan.

The § 103 Standard

To establish a prima facie case of obviousness, three basic criteria *must* be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992); *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Second, there must be a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir.

Hence, when patentability turns on the question of obviousness, the search for and analysis of the prior art includes evidence relevant to the finding of whether there is a teaching, motivation, or suggestion to select and combine the references relied on as evidence of obviousness. See, e.g., *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351-52, 60 USPQ2d 1001, 1008 (Fed. Cir. 2001) ("the central question is whether there is reason to combine [the] references," a question of fact drawing on the Graham factors).

"The factual inquiry whether to combine references must be thorough and searching." Id. It must be based on objective evidence of record. This precedent has been reinforced in myriad decisions, and cannot be dispensed with. See, e.g., Brown & Williamson Tobacco Corp. v. Philip Morris Inc., 229 F.3d 1120, 1124-25, 56 USPQ2d 1456, 1459 (Fed. Cir. 2000) ("a showing of a suggestion, teaching, or motivation to combine the prior art references is an 'essential component of an obviousness holding") (quoting C.R. Bard, Inc., v. M3 Systems, Inc., 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed. Cir. 1998)); In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999) ("Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references."); In re Dance, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998) (there must be some motivation, suggestion, or teaching of the desirability of making the specific combination that was made by the applicant);

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In re Fine, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988) (""teachings of references can be combined only if there is some suggestion or incentive to do so."") (emphasis in original) (quoting ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984)).

The need for specificity pervades this authority. See, e.g., *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) ("particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed").

In view of the § 103 Standard set forth above, Applicant respectfully submits that the Office has not established a *prima facie* case of obviousness.

The Claims

Claim 1 has been amended and, as amended, recites a software architecture for a distributed computing system comprising [added language appears in bold italics]:

- an application configured to handle requests submitted by remote devices over a network; and
- an application program interface to present functions used by the application to access network and computing resources of the distributed computing system, the application program interface comprising various types related to constructing user interfaces, wherein the various types comprise:
- classes which represent managed heap allocated data that has reference assignment semantics;
- interfaces that define a contract that other types can implement;
- delegates that are object oriented function pointers;
- structures that represent static allocated data that has value assignment semantics; and

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In making out the rejection of this claim, the Office argues that Shannon discloses all of the subject matter of this claim except for an application program interface comprising various types related to constructing user interfaces. The Office then relies on Sun and argues that it teaches an API comprising various types related to constructing user interfaces. The Office then reasons that it would have been obvious to combine the teachings of Shannon and Sun "because Shannon' system is based on J2SE (page 6.1, i.e. J2SE is part of J2EE) and sun teaches J2SE is used to construct the client side which includes user interface, to provide complete teaching of J2EE". Applicant continues to respectfully disagree and submits that the Office has not established a prima facie case of obviousness.

Nonetheless, in an effort to advance prosecution, Applicant has amended the claim as indicated above to specifically recite and define various types. Support for the amendment can be found in the Specification on page 11, lines 13-20.

Neither reference discloses or suggests the subject matter of this claim as amended. In rejecting other claims that included a recitation of various types, the Office relied on Flanagan. Applicant respectfully submits that Flanagan neither discloses nor suggests the specific subject matter of this claim as amended. Accordingly, this claim is allowable.

Claims 3-4 depend from claim 1 and are allowable as depending from an allowable base claim.

Claim 5 has been amended and, as amended, recites an application program interface embodied on one or more computer readable media,

comprising: multiple types related to constructing user interfaces, the types comprising classes which represent managed heap allocated data that has reference assignment semantics, interfaces that define a contract that other types can implement, delegates that are object oriented function pointers, structures that represent static allocated data that has value assignment semantics and enumerations which are value types that represent named constants.

In making out the rejection of this claim, the Office argues that Sun discloses all of the subject matter of this claim except for types comprising delegates, structures and enumerations. The Office then relies on Flanagan and argues that it teaches delegates and enumerations and argues that it would be obvious to combine Sun and Flanagan to render the claimed subject matter obvious "because Flanagan clearly show[s] the description of the API supported by Sun." In addition, the Office argues that "although Sun does not teach structures, it would have been obvious the structures are supported because Sun supports abstract class which function as structure."

Applicant continues to respectfully disagree and submits that the Office has not established a *prima facie* case of obviousness.

Nonetheless, in an effort to advance prosecution, Applicant has amended the claim as indicated above to specifically define the various recited types. Support for the amendment can be found in the Specification on page 11, lines 13-20.

The references cited by the Office neither disclose nor suggest the subject matter of this claim as amended. Accordingly, this claim is allowable.

Claim 16 has been amended and, as amended, recites a distributed computer software architecture, comprising [added language appears in bold italics]:

- one or more applications configured to be executed on one or more computing devices, the applications handling requests submitted from remote computing devices;
- · a networking platform to support the one or more applications; and
- an application programming interface to interface the one or more applications with the networking platform, the application programming interface comprising various types related to constructing user interfaces, wherein the various types comprise:
- classes which represent managed heap allocated data that has reference assignment semantics;
- interfaces that define a contract that other types can implement;
- delegates that are object oriented function pointers;
- structures that represent static allocated data that has value assignment semantics; and
- enumerations which are value types that represent named constants.

In making out the rejection of this claim, the Office argues that Shannon discloses all of the subject matter of this claim except for an application program interface comprising various types related to constructing user interfaces. The Office then relies on Sun and argues that it teaches an API comprising various types related to constructing user interfaces. The Office then reasons that the combination of Shannon and Sun would render the subject matter of this claim obvious, and states the following as a motivation to combine the references: "because Shannon's system is based on J2SE and Sun teaches J2SE is used to

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Applicant continues to respectfully disagree and submits that the Office has not established a *prima facie* case of obviousness.

Nonetheless, in an effort to advance prosecution, Applicant has amended the claim as indicated above to specifically recite and define various types. Support for the amendment can be found in the Specification on page 11, lines 13-20.

Neither reference discloses or suggests the subject matter of this claim as amended. In rejecting other claims that included a recitation of various types, the Office relied on Flanagan. Applicant respectfully submits that Flanagan neither discloses nor suggests the specific subject matter of this claim as amended. Accordingly, this claim is allowable.

Claims 18-27 depend from claim 16 and are allowable as depending from an allowable base claim.

Claim 28 has been amended and, as amended, recites a computer system including one or more microprocessors and one or more software programs, the one or more software programs utilizing an application program interface to request services from an operating system, the application program interface including separate commands to request services comprising services related to constructing user interfaces, wherein the application program interface groups API functions into multiple namespaces that define a collection of classes which represent managed heap allocated data that has reference assignment semantics, interfaces that define a contract that other types can implement, delegates that are object oriented function pointers, enumerations which are

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In making out the rejection of this claim, the Office argues that Shannon discloses all of the subject matter of this claim except for an application program 5

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interface including separate commands to request services comprising services related to constructing user interfaces. The Office then relies on Sun and argues that it teaches an API comprising various types related to constructing user interfaces. The Office then reasons that the combination of Shannon and Sun would render the subject matter of this claim obvious, and states the following as a motivation to combine the references: "because Shannon's system is based on J2SE and Sun teaches J2SE is used to construct the client side which includes the user interface, to provide complete teaching of J2EE." Applicant continues to respectfully disagree and submits that the Office

has not established a prima facie case of obviousness.

Nonetheless, in an effort to advance prosecution, Applicant has amended the claim as indicated above to recite subject matter that simply does not appear in the references cited by the Office. Support for the amendment can be found in the Specification on page 11, lines 13-20. Accordingly, this claim is allowable.

Claim 29 has been amended and, as amended recites a method, comprising [added language appears in bold italics]:

- · managing network and computing resources for a distributed computing system; and
- exposing a set of functions that enable developers to access the network and computing resources of the distributed computing system, the set of functions comprising functions to facilitate construction of user interfaces, wherein the functions are grouped into multiple namespaces that define a collection of classes which

In making out the rejection of this claim, the Office simply indicates "see rejection of claim 1 above."

Applicant continues to respectfully disagree and submits that the Office has not established a *prima facie* case of obviousness.

Nonetheless, in an effort to advance prosecution, Applicant has amended the claim as indicated above to recite subject matter that simply does not appear in the references cited by the Office. Support for the amendment can be found in the Specification on page 11, lines 13-20. Accordingly, this claim is allowable.

Claim 30 depends from claim 29 and is allowable as depending from an allowable base claim

Claim 31 has been amended and, as amended, recites a method, comprising creating a namespace with functions that enable drawing and construction of user interfaces, the name space defining classes which represent managed heap allocated data that has reference assignment semantics, interfaces that define a contract that other types can implement, delegates that are object oriented function pointers, structures that represent static allocated data that has value assignment semantics, and enumerations which are value types that represent named constants.

In making out the rejection of this claim, the Office rejects the claim over the combination of Shannon, Sun and Flanagan. Applicant continues to

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respectfully disagree and submits that the Office has not established a *prima facie* case of obviousness.

Nonetheless, in an effort to advance prosecution, Applicant has amended the claim as indicated above to recite subject matter that simply does not appear in the references cited by the Office. Support for the amendment can be found in the Specification on page 11, lines 13-20. Accordingly, this claim is allowable.

Claims 32-40 depend from claim 31 and are allowable as depending from an allowable base claim.

Conclusion

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23 24 25 Applicant respectfully submits that the Office has failed to establish a prima facie case of obviousness for the reasons set forth above. Applicant respectfully requests a Notice of Allowability be issued forthwith. If the next anticipated action is to be anything other than issuance of a Notice of Allowability, Applicant respectfully requests a telephone call for the purpose of scheduling an interview.